
Change in Status of a Dwarf Mistletoe (*Arceuthobium*, Viscaceae) from China

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ABSTRACT. The taxon *Arceuthobium pini* var. *sichuanense*, a parasite of *Picea* in southwestern China, is raised to specific rank. It is allopatric with *A. pini*, which differs in its parasitism of *Pinus*, its much larger shoots, and its smaller male flowers.

A new variety, *Arceuthobium pini* Hawksworth & Wiens var. *sichuanense* H. S. Kiu, a parasite of *Picea*, was recently described from southwestern China (Kiu, 1984a). Here we raise that taxon to specific rank because of the marked differences in morphology and host relations between it and *A. pini*.

Arceuthobium sichuanense (H. S. Kiu) Hawksworth & Wiens, comb. nov. Basionym: *Arceuthobium pini* var. *sichuanense* Kiu H.-s., Acta Phytotaxonomica Sinica 22: 205, 1984. TYPE: China. Sichuan: Dawu, parasite of *Picea likiangensis* var. *balfouriana*, 4,200 m, Wu & Gao 11629 (holotype, CDBI).

Arceuthobium sichuanense differs from *A. pini* in being a much smaller plant (shoots 2–6 cm high vs. 5–20 cm) with smaller staminate flowers (1.5–2 mm vs. 2–2.5 mm diam.). A major difference is that *A. sichuanense* parasitizes only *Picea*, whereas *A. pini* parasitizes only *Pinus*. Both species occur in Sichuan and Xizang (Tibet) in southwestern China, but they are apparently allopatric (Kiu & Wei, 1982) and occur at different elevations: *A. sichuanense* at 3,800–4,200 m and *A. pini* at 2,700–

3,500 m (Kiu, 1984b). At 4,200 m, *A. sichuanense* has the highest elevational distribution of any member of the genus, although two taxa (*A. globosum* subsp. *grandicaule* and *A. vaginatum* subsp. *vaginatum*) approach this limit in central Mexico (Hawksworth & Wiens, 1972). *Arceuthobium sichuanense* is most similar to *A. tibetense* Kiu & Wei Ren, an allopatric species parasite of *Abies* in Xizang, which has even smaller shoots (0.5–2.2 cm high) (Kiu, 1984b). A key to the five taxa of *Arceuthobium* in southwestern China is given by Kiu (1984b).

Arceuthobium sichuanense has recently been found in western Bhutan, where it causes “serious damage” to *Picea likiangensis* var. *balfouriana* and *P. spinulosa* (Naithani & Singh, 1989).

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